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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/651,488 | 08/30/2000 | Donald C. Englin | RA 5265 (33012/294/101) | 9980 |

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| EXAMINER |
|---|
| VITAL, PIERRE M |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2188 | 8 |

DATE MAILED: 07/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| Advisory Action | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/651,488 | ENGLIN ET AL. | |
| | Examiner | Art Unit | |
| | Pierre M. Vital | 2188 | |

*--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

THE REPLY FILED 03 July 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☐ The proposed amendment(s) will not be entered because:

   (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ they raise the issue of new matter (see Note below);

   (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *See Continuation Sheet*.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☐ For purposes of Appeal, the proposed amendment(s) a)☐ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: _____.

   Claim(s) withdrawn from consideration: _____.

8. ☐ The proposed drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)( PTO-1449) Paper No(s). _____.

10. ☒ Other: *see attached*

Reginald G. Bragdon

REGINALD G. BRAGDON
PRIMARY EXAMINER

Continuation of 5. does NOT place the application in condition for allowance because: The claims are not defined over the prior art of record and the applicants' arguments are not persuasive to put the application in condition for allowance.

***Response to Arguments***

Applicant's arguments filed July 3, 2003 have been fully considered but they are not persuasive. As to the remarks, Applicant asserted that:

(a) Gallagher teaches coupling the "store buffer" to a "store-through" cache memory rather than the claimed store-in cache memory.

Examiner respectfully traverses applicant's arguments for the following reasons. As stated in the Final Office Action mailed May 2, 2003, Gallagher discloses the use of a store-in cache coupled to a buffer performing a flush operation or a flush buffer.

It should be borne in mind that, in discussions of electrical components, the terms "connected", "operatively connected", "electrically connected", and like terms denote an electrical path between two components. It is understood, however, that such terms do not preclude the existence of additional components interposed between the two original components, even if an additional such component has the capability of interrupting or affecting signal or data transmission between the two original components. Only through the use of the term "directly connected", or like terms, is it intended to denote an electrical connection between two components that precludes any additional components, other than an electrical conductor, interposed between the two original components.

Examiner would like to point out that the second level cache or cache 26a or L2 cache is a store-in cache as disclosed in column 1, lines 52-57. When a

cache line is modified in the L2 cache, the line is flushed to L3 memory as detailed in column 64, lines 40-42, and the line is flushed from L2 cache to L3 memory through the use of an outpage buffer (*i.e., flush buffer*) as detailed in column 67, lines 5-8, and L2 cache write buffers as detailed in column 13, lines 22-25.

As such, it can be clearly seen that the flush buffer of Gallagher, even though connected to the store-in cache (L2), does not preclude connectivity to the store-through cache (L1) as well. Applicant's invention as broadly claimed provides for a processor coupled to a store-in cache coupled to a flush buffer and does not define a patentably distinct invention over that of Gallagher. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Examiner would suggest amending the claims to more clearly convey the subject matter which applicant sees as his invention.

(b) The L1 cache of Gallagher does not have a flush buffer.

As detailed above in part (a), the flush buffer is connected to both the store-through (L1) cache and the store-in (L2) cache. Therefore, all subsequent arguments related to a store-in cache not coupled to a flush buffer are obsolete.

(c) Applicants' claimed invention has multiple "flush buffers".

The claims as recited provide for a flush buffer comprising a first flush buffer store and a second flush buffer store. Gallagher similarly discloses a flush buffer comprising 8 flush buffer stores as detailed in column 3, lines 4-6.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., multiple flush buffers having its own input and output interface) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicants' invention as claimed provides for a single flush buffer not multiple flush buffers. It is not clear how a single flush buffer can produce multiple flush buffers. Examiner would suggest amending the claims to more clearly convey the subject matter which applicant sees as his invention.